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DATE MAILED: 12/20/2004

APPLICATION NO.	FILING	DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/732,016	12/08/2000		Jens Bergqvist	040010-896 1620		
27045	7590	12/20/2004		EXAMINER		
ERICSSON	· _ ·	WILSON, ROBERT W				
6300 LEGAC M/S EVR C1		ART UNIT	PAPER NUMBER			
PLANO, TX	=			2661		

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)				
Office Action Summany	09/732,016	BERGQVIST, JENS				
Office Action Summary	Examiner	Art Unit				
	Robert W Wilson	2661				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 31 Au	Responsive to communication(s) filed on 31 August 2004.					
2a)⊠ This action is FINAL . 2b)☐ This	This action is FINAL . 2b) This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	•					
 4) Claim(s) 11-21 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 11-21 is/are rejected. 7) Claim(s) 15 & 19 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 						
Application Papers		·				
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)				

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DETAILED ACTION

1.0 The application of Jens Bergqvist for the application entitled "METHOD IN A TELECOMMUNICATION SYSTEM" filed on 12/08/2000 and requesting foreign priority based upon SWEDEN 9904526-2 12/10/1999. Claims 11-21 are pending.

Claim Objections

2.0 Applicant is advised that should claims 11 & 14 be found allowable, claims 15 & 19 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

3.0 Claims 11 & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et. al. (U.S. Patent No.: 6,801,515 B1) in view of Schroeder et. al. (U.S. Patent No.: 6,700,875)

Referring to Claims 11 & 15, Ishikawa teaches: A method of controlling congestion in a cellular telecommunication system having a plurality of radio base station (111s per Fig 1 or Base stations in a CDMA system which controls congestion due to interference per Abstract or col. 3 line 36-col. 6 line 49), wherein each base station service one or more cells in the system (inherent in CDMA that base services one or more than cell), said method comprising the steps of:

Determining the cell is congested (The base determines that uplink interference in channels in the cell per Fig 1 or per Abstract or per col. 3 line 36-col. 6 line 49)

And restricting call access for new call setup requests from user equipments located in the congested cell (The base broadcasts call admission information with regard to channel status to the mobile or user equipment congestion due to interference in channels per Fig 1 or per Abstract or per col. 3 line 36-col. 7 line 49)

Determining by the base serving the congested cell, carrier frequencies on which call accesses are permitted in the congested cell (The base broadcasts call admission information with regard to channel status to the mobile or user equipment congestion due to interference in channels per Fig 1 or per Abstract or per col. 3 line 36-col. 7 line 49)

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Broadcasting by the base station serving the congested cell, a call admission message to the user equipments located in the congested cell, said call admission message indicating the carrier frequencies on which the call accesses are permitted in the congested cell (The base broadcasts call admission information with regard to channel status to the mobile or user equipment congestion due to interference in channels per Fig 1 or per Abstract or per col. 3 line 36-col. 7 line 49)

Ishikawa does not expressly call for determining congestion on a frequency but teaches determining congestion due to interference on a channel per Fig 1 or per Abstract or per col. 3 line 36-col. 7 line 49 or restricting frequencies but teaches the base will refuse to admit a mobile to a specific channel per Fig 1 or per Abstract or per col. 3 line 36-col. 7 line 49

Schroeder teaches: determining congestion on a frequency (col. 1 lines 47-52 & col. 2 line 59, col. 3 lines 46-52) and restricting frequencies (avoid channels that are unusable due to distortion per col. 1 lines 51-52 or channels unusable due to excessive interference per col. 3 line 43-52)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the determining frequency congestion and restriction of frequency usage of Schroeder to the system of Ishikawa because both references are involved solving the problem associated with congestion or interference in an unusable channel in the wireless environment.

Claim Rejections - 35 USC § 103

3.0 Claims 12-14 & 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et. al. (U.S. Patent No.: 6,801,515 B1) in view of Schroeder et. al. (U.S. Patent No.: 6,700,875) in view of Benveniste (U.S. Patent No.: 6,128,498)

Referring to Claims 12-14, the combination Ishikawa et. al. (U.S. Patent No.: 6,801,515 B1) & Schroeder et. al. (U.S. Patent No.: 6,700,875) teaches: The method of claim 11,

The combination Ishikawa et. al. (U.S. Patent No.: 6,801,515 B1) & Schroeder et. al. (U.S. Patent No.: 6,700,875) do not expressly call for: wherein the call admission message also indicated carrier frequencies on which call accesses are permitted in cells neighboring congested cell but teaches carrier frequencies within a cell as claimed in **Claim 12**, wherein the call admission message identifies cell neighbors the congested cell in which the permitted carrier frequencies are utilized but teaches which carrier frequencies are permitted within the cell as claimed in **Claim 13**, wherein the cellular telecommunication system also includes a centralized control unit that controls the plurality of base stations and determines the carrier frequencies on which call accesses are permitted, and the method further comprises the step of retrieving by the base station serving the congested cell, the permitted carrier frequencies from the centralized control unit as claimed in **Claim 14**.

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Beneveniste teaches: wherein the call admission message also indicated carrier frequencies on which call accesses are permitted in cells neighboring congested cell (The combination of primary references disclose a call admission message being broadcast associated with a single cell. The secondary reference Beneviste teaches a OMC 220 per Fig 3. The OMC gathers frequency interference information and provides direct frequency channel assignments per col. 12 line 6-col. 13 line 21. It would have been obvious to one of ordinary skill in the art at the time of the invention that broadcast message would be able to contain carrier frequencies on which calls would be permitted based upon the data from the OMC) and which claimed in Claim 12, wherein the call admission message identifies cell neighbors the congested cell in which the permitted carrier frequencies are utilized (The combination of primary references disclose a call admission message being broadcast associated with a single cell. The secondary reference Beneviste teaches a OMC 220 per Fig 3. The OMC gathers frequency interference information and provides direct frequency channel assignments per col. 12 line 6-col. 13 line 21. It would have been obvious to one of ordinary skill in the art at the time of the invention that broadcast message would be carrier frequencies are permitted on neighboring cell basis) as claimed in Claim 13, wherein the cellular telecommunication system also includes a centralized control unit that controls the plurality of base stations and determines the carrier frequencies on which call accesses are permitted, and the method further comprises the step of retrieving by the base station serving the congested cell, the permitted carrier frequencies from the centralized control unit (The combination of primary references disclose a call admission message being broadcast associated with a single cell. The secondary reference Beneviste teaches a OMC 220 per Fig 3 or control unit. The OMC gathers frequency interference information and provides direct frequency channel assignments per col. 12 line 6-col. 13 line 21. It would have been obvious to one of ordinary skill in the art at the time of the invention that the OMC determines the carrier frequencies on which call accesses are permitted) as claimed in Claim 14.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the OMC of Benveniste to the system of the combination of Ishikawa et. al. (U.S. Patent No.: 6,801,515 B1) & Schroeder et. al. (U.S. Patent No.: 6,700,875) in order to build a system because they are involved solving the same problem of minimizing interference congestion in a wireless environment.

Referring to Claims 16-19, the combination Ishikawa et. al. (U.S. Patent No.: 6,801,515 B1) & Schroeder et. al. (U.S. Patent No.: 6,700,875) teaches: The method of claim 15,

The combination Ishikawa et. al. (U.S. Patent No.: 6,801,515 B1) & Schroeder et. al. (U.S. Patent No.: 6,700,875) do not expressly call for: wherein the call admission message also indicated carrier frequencies on which call accesses are restricted in cells neighboring congested cell but teaches carrier frequencies within a cell as claimed in Claim 16, wherein the call admission message identifies carrier frequencies on which call accesses are prohibited in both congested cell and in cells neighboring the congested cell but teaches which carrier frequencies are prohibited within the cell as claimed in Claim 17, wherein the call admission message indicated a congestion status for at least one of the cells neighboring the congested cell but teaches the congestion within the cell as claimed in Claim 18, & wherein the cellular

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telecommunication system also includes a centralized control unit that controls the plurality of base stations and determines the carrier frequencies on which call accesses are permitted, and the method further comprises the step of retrieving by the base station serving the congested cell, the permitted carrier frequencies from the centralized control unit as claimed in **Claim 19**.

Beneveniste teaches: wherein the call admission message also indicated carrier frequencies on which call accesses are restricted in cells neighboring congested cell (The combination of primary references disclose a call admission message being broadcast associated with a single cell. The secondary reference Beneviste teaches a OMC 220 per Fig 3. The OMC gathers frequency interference information and provides direct frequency channel assignments per col. 12 line 6-col. 13 line 21. It would have been obvious to one of ordinary skill in the art at the time of the invention that broadcast message would be able to contain carrier frequencies on which calls would be restricted based upon the data from the OMC) and which claimed in Claim 16, wherein the call admission message identifies cell neighbors the congested cell in which the prohibited carrier frequencies are utilized (The combination of primary references disclose a call admission message being broadcast associated with a single cell. The secondary reference Beneviste teaches a OMC 220 per Fig 3. The OMC gathers frequency interference information and provides direct frequency channel assignments per col. 12 line 6-col. 13 line 21. It would have been obvious to one of ordinary skill in the art at the time of the invention that broadcast message would be carrier frequencies are prohibited on neighboring cell basis) as claimed in Claim 17, wherein the call admission message indicates a congestion status for at least one of the cells neighboring the congested cell (The combination of the primary reference teach a call admission message within a cell. Beneviste teaches an OMC which has congestion between neighboring cells. It would have been obvious to one of ordinary skill the art to send a call admission message which contains cell neighbor congestion based upon the availability of data between cells from the OMC) wherein the cellular telecommunication system also includes a centralized control unit that controls the plurality of base stations and determines the carrier frequencies on which call accesses are permitted, and the method further comprises the step of retrieving by the base station serving the congested cell, the permitted carrier frequencies from the centralized control unit (The combination of primary references disclose a call admission message being broadcast associated with a single cell. The secondary reference Beneviste teaches a OMC 220 per Fig 3 or control unit. The OMC gathers frequency interference information and provides direct frequency channel assignments per col. 12 line 6-col. 13 line 21. It would have been obvious to one of ordinary skill in the art at the time of the invention that the OMC determines congestion status of the cell) as claimed in Claim 19.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the OMC of Benveniste to the system of the combination of Ishikawa et. al. (U.S. Patent No.: 6,801,515 B1) & Schroeder et. al. (U.S. Patent No.: 6,700,875) in order to build a system because they are involved solving the same problem of minimizing interference congestion in a wireless environment.

Claim Rejections - 35 USC § 103

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4.0 Claims 20 & 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et. al. (U.S. Patent No.: 6,801,515 B1) in view of Schroeder et. al. (U.S. Patent No.: 6,700,875)

Referring to Claim 20, Ishikawa teaches: In a base station in a cellular telecommunication system (11 per Fig 1 or base station), a method of controlling congestion at call setup in the cell served by the base station (111s per Fig 1 or Base stations in a CDMA system which controls congestion due to interference broadcasts call admission information per Abstract or col. 3 line 36-col. 6 line 49)

Determining the cell is congested (The base determines that uplink interference in channels in the cell per Fig 1 or per Abstract or per col. 3 line 36-col. 6 line 49)

Determining the total uplink interference level for the uplink connections to the base station from user equipments located in the congested cell (The base station determines the measured uplink interference associated with it's own base station or the total interference level per col. 4 line 47-col. 5 line 10)

Comparing the total uplink interference level with the power threshold value (threshold per col. 4 line 47-col. 5 line 10)

Identifying carrier frequencies on which calls are permitted on neighboring cells (The base broadcasts call admission information with regard to channel status to the mobile or user equipment congestion due to interference in channels associated with its own cell per Fig 1 or per Abstract or per col. 3 line 36-col. 7 line 49)

Broadcasting to user's equipment located in the congested cell, the carrier frequencies on which call accesses are permitted in cells neighboring the congested cell (The base broadcasts call admission information with regard to channel status to the mobile or user equipment congestion due to interference in channels per Fig 1 or per Abstract or per col. 3 line 36-col. 7 line 49)

Ishikawa does not expressly call for: identifying carrier frequencies on which call accesses are permitted in cells neighboring but teaches determining congestion due to interference on a channel per Fig 1 or per Abstract or per col. 3 line 36-col. 7 line 49 or broadcasting which call access are permitted on cells neighboring the congested cell but teaches the base will refuse to admit a mobile to a specific channel per Fig 1 or per Abstract or per col. 3 line 36-col. 7 line 49

Schroeder teaches: identifying carrier frequencies on which call access are permitted (col. 1 lines 47-52 & col. 2 line 59, col. 3 lines 46-52)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the determining frequency congestion and restriction of frequency usage of Schroeder to the system of Ishikawa because both references are involved solving the problem associated with congestion or interference in an unusable channel in the wireless environment.

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The combination of Ishikawa and Schroeder do not expressly call for: call accesses permitted on cells neighboring the congested cell or frequencies permitted on neighboring cells but teach call access and frequencies permitted on one cell.

Benveniste teaches: call accesses permitted on cells neighboring the congested cell (The OMC per Figs 3 & 4gathers frequency interference information and provides direct frequency channel assignments per col. 12 line 6-col. 13 line 21. It would have been obvious to one of ordinary skill in the art at the time of the invention that the OMC determines the carrier frequencies on which call accesses are permitted on neighboring cells) and frequencies permitted on neighboring cells but teach call access and frequencies permitted on one cell The secondary reference Beneviste teaches a OMC 220 per Fig 3 or control unit (The OMC gathers frequency interference information and provides direct frequency channel assignments per col. 12 line 6-col. 13 line 21. It would have been obvious to one of ordinary skill in the art at the time of the invention that the OMC determines the carrier frequencies on which call accesses are permitted on neighboring cells.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the OMC of Benveniste to the system of the combination of Ishikawa et. al. (U.S. Patent No.: 6,801,515 B1) & Schroeder et. al. (U.S. Patent No.: 6,700,875) in order to build a system because they are involved solving the same problem of minimizing interference congestion in a wireless environment.

Referring to Claim 21, Ishikawa teaches: In a user equipment located in a congested cell in a cellar telecommunication system (112 per Fig 1 or user equipment located congested cell due to interference per Abstract or col. 3 line 36-col. 6 line 49)

A method of obtaining call access (Receives call admission from the Base or call access per col. 3 line 37-col. 6 line 49)

Receiving from a base station serving the congested cell, a call admission message that includes an indication of carrier frequencies on which call access are permitted in the congested cell and the cells neighboring the congested cell (The base station broadcast the interference level on the frequency channel of the cell per Abstract or col. 3 line 36-col. 6 line 49)

Analyzing the call admission message to determine whether there is a carrier frequency in the congested cell on which call access are permitted (The mobile determines which channel is permitted based upon call admission broadcast per Abstract or col. 3 line 36-col. 6 line 49)

If there is a carrier frequency in the congested cell on which call accesses are permitted, requesting call access on the permitted carrier frequency (If there is a channel within the single cell in which interference is lower than a threshold permit access per Abstract or col. 3 line 36-col. 6 line 49)

If there is not a carrier frequency in the congested cell on which call access are permitted, analyzing the call admission message to determine whether there is a carrier frequency in the cell

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neighboring the congested cell on which call accesses are permitted (If there is a channel within the single cell in which interference is lower than a threshold permit access per Abstract or col. 3 line 36-col. 6 line 49)

If there is a carrier frequency in a cell neighboring the congested cell on which call accesses are permitted, requesting call setup on the carrier frequency in the cell neighboring the congested cell on which call accesses are permitted (If there is a channel within the single cell in which interference is lower than a threshold permit access per Abstract or col. 3 line 36-col. 6 line 49)

Ishikawa does not expressly call for: identifying carrier frequencies or information on neighboring cells but teaches the base will refuse to admit a mobile to a specific channel per Fig 1 or per Abstract or per col. 3 line 36-col. 7 line 49

Schroeder teaches: identifying carrier frequencies (col. 1 lines 47-52 & col. 2 line 59, col. 3 lines 46-52)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the determining frequency congestion and restriction of frequency usage of Schroeder to the system of Ishikawa because both references are involved solving the problem associated with congestion or interference in an unusable channel in the wireless environment.

The combination of Ishikawa and Schroeder do not expressly call for: providing information on neighboring cells but teach call access and frequencies permitted on one cell.

Benveniste teaches: information processing on neighboring cells (The OMC per Figs 3 & 4 gathers frequency interference information and provides direct frequency channel assignments per col. 12 line 6-col. 13 line 21. It would have been obvious to one of ordinary skill in the art at the time of the invention that the OMC determines the carrier frequencies on which call accesses are permitted on neighboring cells) and frequencies permitted on neighboring cells but teach call access and frequencies permitted on one cell The secondary reference Beneviste teaches a OMC 220 per Fig 3 or control unit (The OMC gathers frequency interference information and provides direct frequency channel assignments per col. 12 line 6-col. 13 line 21. It would have been obvious to one of ordinary skill in the art at the time of the invention that the OMC determines the carrier frequencies on which call accesses are permitted on neighboring cells consequently a call admission message could be sent which specifies the availability of frequency channels permitted on neighboring cells.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the OMC of Benveniste to the system of the combination of Ishikawa et. al. (U.S. Patent No.: 6,801,515 B1) & Schroeder et. al. (U.S. Patent No.: 6,700,875) in order to build a system because they are involved solving the same problem of minimizing interference congestion in a wireless environment.

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Response to Amendment

5.0 Applicant's arguments with respect to claims 11-21 have been considered but are moot in view of the new ground(s) of rejection.

The examiner respectively disagrees with the applicant's argument that the new reference fail to disclose a restricting step of assigning carrier frequencies, defining a power threshold, and or sharing of congestion information from the base stations with a controlling station.

Refer to the above rejection for details.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

7.0 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Wallentin, Patent No.: 6,233,222, dated 1/19/99 discloses a Radio Network Control Node, Base stations and Mobile station. The base station measures uplink interference on a frequency basis and the base station sends out congestion messages to the mobiles with the congestion information. It was inappropriate to utilize this reference for an obvious rejection under 103(C) because this prior art reference has the same assignee as the application at the time of the invention. The claims in the application are also different so a obvious and non obvious double patenting rejection were also deemed inappropriate.

Almgren, Patent No.: 6,212,384, dated 4/3/2001 discloses a Base stations and Mobile station. The uplink interference measurements were shared between neighboring base stations. It was inappropriate to utilize this reference for an obvious rejection under 103(C) because this prior art reference has the same assignee as the application at the time of the invention. The claims in the application are also different so a obvious and non obvious double patenting rejection were also deemed inappropriate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571/272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert W Wilson

Examiner Art Unit 2661

RWW December 10, 2004

PRIMARY EXAMINER